



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/825,997	04/05/2001	Robert Gentile	M4065.0417/P417	3856
24998	7590	09/01/2005	EXAMINER	
DICKSTEIN SHAPIRO MORIN & OSHINSKY LLP 2101 L Street, NW Washington, DC 20037			CHU, GABRIEL L	
			ART UNIT	PAPER NUMBER
			2114	
DATE MAILED: 09/01/2005				

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/825,997

Applicant(s)

GENTILE, ROBERT

Examiner

Gabriel L. Chu

Art Unit

2114

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 July 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-52 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-52 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 05 April 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

2. **Claims 1-52 rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement.** The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. Referring to claims 1-52, Applicant has amended claims to include claim language to the effect of a “single request” or “single communication request”. The “single request” language does not appear anywhere in the specification or its concepts. While paragraph 13 of the pre-grant publication and boxes 18 and 19 in the drawings do convey that a server is connected to and a BIOS subsequently downloaded, there is no indication how many requests this may comprise.

Although the originally filed claims 10 and 40 disclose a “request”, there is no further indication of what action or actions this “request” may comprise, and therefore what is considered to be a single request. Examiner emphasizes, as Applicant argues (e.g., page 14-15 of Applicant’s arguments), that the word single means “only one”. Such limited language has not heretofore been used and qualifies as new matter.

Claim Objections

Art Unit: 2114

3. Claims 1, 15, 24, 32, 48 objected to because of the following informalities:

Referring to claims 1, 15, 24, 32, 48, "said single communication request" has no antecedent basis. Examiner understands this to refer to the "single request" that is communicated. Examiner notes that a request for a BIOS is not the same as a request for communication. Appropriate correction is required.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1-14, 24-48 rejected under 35 U.S.C. 103(a) as being unpatentable over US 6314455 to Cromer et al. in view of US 5230052 to Dayan et al. Referring to claim 1, Cromer et al. discloses upon startup, determining whether a BIOS of a computer system is corrupt (From figure 4, 412.);

continuing with a normal boot if said BIOS is not corrupt (From figure 4, 410.);

if said BIOS is corrupt: initializing components in a boot block of said computer system sufficient to establish a communications connection with a recovery server, locating said recovery server, connecting to said recovery server, and sending system information to said recovery server (From figure 4, 412, 422.);

downloading an uncorrupted version of said BIOS from said recovery server based on said system information (From figure 4, 424.);

programming said uncorrupted BIOS onto said computer system's BIOS storage

area (From figure 4, 426.);

and rebooting (From figure 4, 428.).

Although Cromer does not specifically disclose that the request for an uncorrupted BIOS may be communicated in a "single request", this is known in the art. An example of this is shown by Dayan, from line 57 of column 7, "The RIBL routine selects the remote source for loading the BIOS image and transmits a request for procurement of BIOS. Included in the requesting message are a network name for the requesting station, the name of the remote system from which BIOS is to be procured, and, optionally, a security validation code. The remote system validates the request and, if the local station is deemed appropriate for reception of BIOS, determines the configuration needed, builds the appropriate BIOS including a master boot record, and transmits first a message indicating the size and load and execute addresses for the BIOS to follow and then the BIOS image, step 104." A person of ordinary skill in the art at the time of the invention would have been motivated to use a "single request" because it reduces network traffic and expedites BIOS recovery, and performing actions in less steps is a known and strived for efficiency.

6. Referring to claims 2 and 33, Cromer et al. discloses one of said components is a network card. (From line 45 of column 3, "FIG. 1 illustrates a pictorial representation of a data processing system including a plurality of client computer systems 104 coupled to a server computer system 100 utilizing a hub 102 in accordance with the method and system of the present invention. Server computer system 100 is connected to a hub 102 utilizing a local area network (LAN) connector bus 106. Respective client systems

Art Unit: 2114

104 also connect to hub 102 through respective LAN busses 106. The preferred form of the network conforms to the Ethernet specification and uses such hubs. It will be appreciated, however, that other forms of networks, such as token ring, may be utilized to implement the invention.”).

7. Referring to claims 3, 11, 26, and 34, Cromer et al. discloses said computer system has a local area network (From line 45 of column 3, “FIG. 1 illustrates a pictorial representation of a data processing system including a plurality of client computer systems 104 coupled to a server computer system 100 utilizing a hub 102 in accordance with the method and system of the present invention. Server computer system 100 is connected to a hub 102 utilizing a local area network (LAN) connector bus 106. Respective client systems 104 also connect to hub 102 through respective LAN busses 106. The preferred form of the network conforms to the Ethernet specification and uses such hubs. It will be appreciated, however, that other forms of networks, such as token ring, may be utilized to implement the invention.”).

8. Referring to claims 4, 12, 27, 35, 43, although Cromer et al. does not specifically disclose said computer system connects to said recovery server over a wide area network, connecting over a WAN is notoriously well known in the art. Examiner takes official notice for wide area networks. A person of ordinary skill in the art at the time of the invention would have been motivated to connect to a server over a WAN because it provides connectivity over a wide geographic area. Further, from line 58 of column 3, “A “network” may include any type of data communications channel, such as an Ethernet network, token ring, X.10, or X.25. Those skilled in the art will recognize that the

Art Unit: 2114

invention described herein may be implemented utilizing any type of data communications channel. However, the preferred embodiment is implemented utilizing an Ethernet network."

9. Referring to claims 5, 9, 13, 28, 31, 36, 39, 44, 47, although Cromer et al. does not specifically disclose said computer system connects to said recovery server over the internet, connecting over the internet is notoriously well known in the art. Examiner takes official notice for the internet. A person of ordinary skill in the art at the time of the invention would have been motivated to connect to a server over the internet because it provides up to global connectivity. Further, from line 58 of column 3, "A "network" may include any type of data communications channel, such as an Ethernet network, token ring, X.10, or X.25. Those skilled in the art will recognize that the invention described herein may be implemented utilizing any type of data communications channel. However, the preferred embodiment is implemented utilizing an Ethernet network."

10. Referring to claims 6, 37, 45, although Cromer et al. does not specifically disclose one of said components is a modem, including a modem in a computer system is notoriously well known in the art. Examiner takes official notice for modems. A person of ordinary skill in the art at the time of the invention would have been motivated to include a modem in a computer system because it allows a computer to access a communications medium, such as a cable network or telephone lines, for data communications. Further, from line 58 of column 3, "A "network" may include any type of data communications channel, such as an Ethernet network, token ring, X.10, or X.25. Those skilled in the art will recognize that the invention described herein may be

Art Unit: 2114

implemented utilizing any type of data communications channel. However, the preferred embodiment is implemented utilizing an Ethernet network.”

11. Referring to claim 7, although Cromer et al. does not specifically disclose said computer system connects to said recovery server over a direct dial connection, connecting a computer by dialing into a network is notoriously well known in the art. Examiner takes official notice for dial-up connections. A person of ordinary skill in the art at the time of the invention would have been motivated to use dial-up a connection to connect to a server because he or she would have been able to connect wherever there is a telephone connection. Further, from line 58 of column 3, “A "network" may include any type of data communications channel, such as an Ethernet network, token ring, X.10, or X.25. Those skilled in the art will recognize that the invention described herein may be implemented utilizing any type of data communications channel. However, the preferred embodiment is implemented utilizing an Ethernet network.”

12. Referring to claims 8, 30, 38, 46, although Cromer et al. does not specifically disclose said computer system connects to said recovery server through an internet service provider, connecting to a server over an ISP is notoriously well known in the art. Examiner takes official notice for ISPs. A person of ordinary skill in the art at the time of the invention would have been motivated to connect to a server using an ISP because ISPs provide access to the internet, a global communications network that interconnects networks of various design. Further, from line 58 of column 3, “A "network" may include any type of data communications channel, such as an Ethernet network, token ring, X.10, or X.25. Those skilled in the art will recognize that the invention described herein

Art Unit: 2114

may be implemented utilizing any type of data communications channel. However, the preferred embodiment is implemented utilizing an Ethernet network."

13. Referring to claim 10, Cromer et al. discloses receiving at a server a request for an uncorrupted version of a BIOS transmitted by a computer system with a corrupted version of said BIOS detected during startup (Figure 4, 412, 422.);

receiving information from said computer system (Figure 4, 412, 422.);

and responsive to said system information, transmitting an uncorrupted version of said BIOS to said computer system (Figure 4, 424.).

Although Cromer does not specifically disclose that the request for an uncorrupted BIOS may be a "single communication request", this is known in the art. An example of this is shown by Dayan, from line 57 of column 7, "The RIBL routine selects the remote source for loading the BIOS image and transmits a request for procurement of BIOS. Included in the requesting message are a network name for the requesting station, the name of the remote system from which BIOS is to be procured, and, optionally, a security validation code. The remote system validates the request and, if the local station is deemed appropriate for reception of BIOS, determines the configuration needed, builds the appropriate BIOS including a master boot record, and transmits first a message indicating the size and load and execute addresses for the BIOS to follow and then the BIOS image, step 104." A person of ordinary skill in the art at the time of the invention would have been motivated to use a "single request" because it reduces network traffic and expedites BIOS recovery, and performing actions in less steps is a known and strived for efficiency.

Art Unit: 2114

14. Referring to claim 14, although Cromer et al. does not specifically disclose said server and said computer system are connected through said computer system's modem, connecting through a modem is notoriously well known in the art. Examiner takes official notice for a modem. A person of ordinary skill in the art at the time of the invention would have been motivated to connect using a modem because modems are devices of extremely common inclusion in modern day computer systems, designed for data communications with another computer system. Further, from line 58 of column 3, "A "network" may include any type of data communications channel, such as an Ethernet network, token ring, X.10, or X.25. Those skilled in the art will recognize that the invention described herein may be implemented utilizing any type of data communications channel. However, the preferred embodiment is implemented utilizing an Ethernet network."

15. Referring to claim 24, Cromer et al. discloses a computer system, said computer system comprising a processor, a BIOS recovery program, a BIOS storage area containing said BIOS, RAM, a first communications system and a chipset to control the flow of data between the processor, the motherboard bus and the RAM (Figure 2.);

and a recovery server, said recovery server comprising a processor, a storage medium, and a second communications system (Figure 1, 100, wherein the server is capable of processing, storing, and communicating.);

wherein said processor of said computer system, in response to detecting a corrupt version of said BIOS detecting during startup, is adapted to execute said BIOS recovery program to: initialize in a boot block of said computer system, said chipset,

Art Unit: 2114

RAM, and first communications system; locate said recovery server, connect to said recovery server through said first and second communications systems; send system information to said recovery server (Figure 4, 412, 422.);

download from said recovery server an uncorrupted version of said BIOS based on said system information (Figure 4, 424.);

stores said uncorrupted version of said BIOS into said BIOS storage area (Figure 4, 426.);

and reboot said computer system (Figure 4, 428.).

Although Cromer does not specifically disclose that the request for an uncorrupted BIOS may be communicated in a "single request", this is known in the art. An example of this is shown by Dayan, from line 57 of column 7, "The RIBL routine selects the remote source for loading the BIOS image and transmits a request for procurement of BIOS. Included in the requesting message are a network name for the requesting station, the name of the remote system from which BIOS is to be procured, and, optionally, a security validation code. The remote system validates the request and, if the local station is deemed appropriate for reception of BIOS, determines the configuration needed, builds the appropriate BIOS including a master boot record, and transmits first a message indicating the size and load and execute addresses for the BIOS to follow and then the BIOS image, step 104." A person of ordinary skill in the art at the time of the invention would have been motivated to use a "single request" because it reduces network traffic and expedites BIOS recovery, and performing actions in less steps is a known and strived for efficiency.

Art Unit: 2114

16. Referring to claim 25, Cromer et al. discloses said first and second communication system are network cards (From line 45 of column 3, "FIG. 1 illustrates a pictorial representation of a data processing system including a plurality of client computer systems 104 coupled to a server computer system 100 utilizing a hub 102 in accordance with the method and system of the present invention. Server computer system 100 is connected to a hub 102 utilizing a local area network (LAN) connector bus 106. Respective client systems 104 also connect to hub 102 through respective LAN busses 106. The preferred form of the network conforms to the Ethernet specification and uses such hubs. It will be appreciated, however, that other forms of networks, such as token ring, may be utilized to implement the invention.").

17. Referring to claim 29, although Cromer et al. does not specifically disclose said first and second communication systems are modems, using a modem in a computer to connect to another computer with a modem is notoriously well known in the art. Examiner takes official notice for modems. A person of ordinary skill in the art at the time of the invention would have been motivated to connect using a modem because modems are devices of extremely common inclusion in modern day computer systems, designed for data communications with another computer system. Further, from line 58 of column 3, "A "network" may include any type of data communications channel, such as an Ethernet network, token ring, X.10, or X.25. Those skilled in the art will recognize that the invention described herein may be implemented utilizing any type of data communications channel. However, the preferred embodiment is implemented utilizing an Ethernet network."

Art Unit: 2114

18. Referring to claim 32, Cromer et al. discloses a computer system, said computer system comprising a processor, a bus, a BIOS recovery program, a BIOS storage area containing said BIOS, RAM, and a first communications system and a chipset to control the flow of data between the processor, the bus and the RAM (Figure 2.);

wherein said computer system's processor, in response to detecting a corrupt version of said BIOS during startup, is adapted to execute said BIOS recovery program to: initialize in a boot block of said chipset of said computer system, RAM, and said first communications system, locate a recovery server, connect to said recovery server through said first communications system, send system information to said recovery server (Figure 4, 412, 422.);

download from said recovery server an uncorrupted version of said BIOS based on said system information (Figure 4, 424.);

store said uncorrupted version of BIOS into said BIOS storage area (Figure 4, 426.);

and reboot (Figure 4, 428.).

Although Cromer does not specifically disclose that the request for an uncorrupted BIOS may be communicated in a "single request", this is known in the art. An example of this is shown by Dayan, from line 57 of column 7, "The RIBL routine selects the remote source for loading the BIOS image and transmits a request for procurement of BIOS. Included in the requesting message are a network name for the requesting station, the name of the remote system from which BIOS is to be procured, and, optionally, a security validation code. The remote system validates the request

Art Unit: 2114

and, if the local station is deemed appropriate for reception of BIOS, determines the configuration needed, builds the appropriate BIOS including a master boot record, and transmits first a message indicating the size and load and execute addresses for the BIOS to follow and then the BIOS image, step 104.” A person of ordinary skill in the art at the time of the invention would have been motivated to use a “single request” because it reduces network traffic and expedites BIOS recovery, and performing actions in less steps is a known and strived for efficiency.

19. Referring to claim 40, Cromer et al. discloses a recovery server, said recovery server comprising a processor, a memory containing an uncorrupted version of a BIOS in a boot block for a computer system; and a first communications system (Figure 1, 100, wherein server is capable of processing, stores at least a flash image for transmission, and is capable of communicating.);

wherein said recovery server, in response to receiving a request transmitted by said computer system with a corrupted version of said BIOS detected during startup (Figure 4, 412.),

is configured to connect to said computer system, receive system information from said computer system (Figure 4, 412, 422.),

and transmit said uncorrupted version of said BIOS to said computer system (Figure 4, 424.).

Although Cromer does not specifically disclose that the request for an uncorrupted BIOS may be a “single communication request”, this is known in the art. An example of this is shown by Dayan, from line 57 of column 7, “The RIBL routine selects

Art Unit: 2114

the remote source for loading the BIOS image and transmits a request for procurement of BIOS. Included in the requesting message are a network name for the requesting station, the name of the remote system from which BIOS is to be procured, and, optionally, a security validation code. The remote system validates the request and, if the local station is deemed appropriate for reception of BIOS, determines the configuration needed, builds the appropriate BIOS including a master boot record, and transmits first a message indicating the size and load and execute addresses for the BIOS to follow and then the BIOS image, step 104." A person of ordinary skill in the art at the time of the invention would have been motivated to use a "single request" because it reduces network traffic and expedites BIOS recovery, and performing actions in less steps is a known and strived for efficiency.

20. Referring to claim 41, Cromer et al. discloses one of said components is a network card. (From line 45 of column 3, "FIG. 1 illustrates a pictorial representation of a data processing system including a plurality of client computer systems 104 coupled to a server computer system 100 utilizing a hub 102 in accordance with the method and system of the present invention. Server computer system 100 is connected to a hub 102 utilizing a local area network (LAN) connector bus 106. Respective client systems 104 also connect to hub 102 through respective LAN busses 106. The preferred form of the network conforms to the Ethernet specification and uses such hubs. It will be appreciated, however, that other forms of networks, such as token ring, may be utilized to implement the invention.").

Art Unit: 2114

21. Referring to claim 42, Cromer et al. discloses said computer system has a local area network (From line 45 of column 3, "FIG. 1 illustrates a pictorial representation of a data processing system including a plurality of client computer systems 104 coupled to a server computer system 100 utilizing a hub 102 in accordance with the method and system of the present invention. Server computer system 100 is connected to a hub 102 utilizing a local area network (LAN) connector bus 106. Respective client systems 104 also connect to hub 102 through respective LAN busses 106. The preferred form of the network conforms to the Ethernet specification and uses such hubs. It will be appreciated, however, that other forms of networks, such as token ring, may be utilized to implement the invention.").

22. Referring to claim 48, Cromer et al. discloses a computer system, said computer system comprising a BIOS and components sufficient in a boot block to enable recovery of an uncorrupted BIOS from a remote server (Figure 2.);

wherein said computer system, in response to detecting a corrupt version of said BIOS during startup (Figure 4, 412.),

is configured to operate said components to: connect to a remote server, send system information to said remote server (Figure 4, 412, 422.);

receive, based on said system information, an uncorrupted version of said BIOS from said remote server (Figure 4, 424.);

store said uncorrupted version of said BIOS (Figure 4, 426.),

and reboot said computer system (Figure 4, 428.).

Although Cromer does not specifically disclose that the request for an

Art Unit: 2114

uncorrupted BIOS may be communicated in a "single request", this is known in the art. An example of this is shown by Dayan, from line 57 of column 7, "The RIBL routine selects the remote source for loading the BIOS image and transmits a request for procurement of BIOS. Included in the requesting message are a network name for the requesting station, the name of the remote system from which BIOS is to be procured, and, optionally, a security validation code. The remote system validates the request and, if the local station is deemed appropriate for reception of BIOS, determines the configuration needed, builds the appropriate BIOS including a master boot record, and transmits first a message indicating the size and load and execute addresses for the BIOS to follow and then the BIOS image, step 104." A person of ordinary skill in the art at the time of the invention would have been motivated to use a "single request" because it reduces network traffic and expedites BIOS recovery, and performing actions in less steps is a known and strived for efficiency.

23. Claims 15-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over US 6314455 to Cromer et al. in view of JP409258965A to Aoki and US 5230052 to Dayan et al. Referring to claim 15, Cromer et al. discloses upon startup of a computer system, checking whether a BIOS of said computer system is corrupt (Figure 4, 412.);

continuing with a normal boot if said BIOS is not corrupt (Figure 4, 410.);

if said BIOS is corrupt: initializing components in a boot block of said computer system sufficient to establish a communications connection with a recovery server, locating a recovery server, connecting to said recovery server and sending system

Art Unit: 2114

information to said recovery server (Figure 4, 412, 422.);

transmitting, based on said system information, an uncorrupted version of said BIOS; receiving said uncorrupted version of said BIOS at said computer system (Figure 4, 424.);

program said uncorrupted version of said BIOS onto a BIOS storage area of said computer system; and rebooting said computer system (Figure 4, 426.).

Although Cromer et al. do not specifically disclose that utility software can be transmitted to the client and executed to program the BIOS, sending a flash update utility along with the flash update is known in the art. From Aoki, "A host station 1 transmits an update program obtained by previously changing the operation and the version of the program to the base station 2." A person of ordinary skill in the art at the time of the invention would have been motivated to send a flash update utility because, from Aoki, "an update program [is] obtained by previously changing the operation."

Although Cromer in view of Aoki does not specifically disclose that the request for an uncorrupted BIOS may be communicated in a "single request", this is known in the art. An example of this is shown by Dayan, from line 57 of column 7, "The RIBL routine selects the remote source for loading the BIOS image and transmits a request for procurement of BIOS. Included in the requesting message are a network name for the requesting station, the name of the remote system from which BIOS is to be procured, and, optionally, a security validation code. The remote system validates the request and, if the local station is deemed appropriate for reception of BIOS, determines the configuration needed, builds the appropriate BIOS including a master boot record,

Art Unit: 2114

and transmits first a message indicating the size and load and execute addresses for the BIOS to follow and then the BIOS image, step 104.” A person of ordinary skill in the art at the time of the invention would have been motivated to use a “single request” because it reduces network traffic and expedites BIOS recovery, and performing actions in less steps is a known and strived for efficiency.

24. Referring to claim 16, Cromer et al. discloses one of said components is a network card. (From line 45 of column 3, “FIG. 1 illustrates a pictorial representation of a data processing system including a plurality of client computer systems 104 coupled to a server computer system 100 utilizing a hub 102 in accordance with the method and system of the present invention. Server computer system 100 is connected to a hub 102 utilizing a local area network (LAN) connector bus 106. Respective client systems 104 also connect to hub 102 through respective LAN busses 106. The preferred form of the network conforms to the Ethernet specification and uses such hubs. It will be appreciated, however, that other forms of networks, such as token ring, may be utilized to implement the invention.”).

25. Referring to claim 17, Cromer et al. discloses said computer system has a local area network (From line 45 of column 3, “FIG. 1 illustrates a pictorial representation of a data processing system including a plurality of client computer systems 104 coupled to a server computer system 100 utilizing a hub 102 in accordance with the method and system of the present invention. Server computer system 100 is connected to a hub 102 utilizing a local area network (LAN) connector bus 106. Respective client systems 104 also connect to hub 102 through respective LAN busses 106. The preferred form of

Art Unit: 2114

the network conforms to the Ethernet specification and uses such hubs. It will be appreciated, however, that other forms of networks, such as token ring, may be utilized to implement the invention.").

26. Referring to claim 18, although Cromer et al. does not specifically disclose said computer system connects to said recovery server over a wide area network, connecting over a WAN is notoriously well known in the art. Examiner takes official notice for wide area networks. A person of ordinary skill in the art at the time of the invention would have been motivated to connect to a server over a WAN because it provides connectivity over a wide geographic area. Further, from line 58 of column 3, "A "network" may include any type of data communications channel, such as an Ethernet network, token ring, X.10, or X.25. Those skilled in the art will recognize that the invention described herein may be implemented utilizing any type of data communications channel. However, the preferred embodiment is implemented utilizing an Ethernet network."

27. Referring to claims 19 and 23, although Cromer et al. does not specifically disclose said computer system connects to said recovery server over the internet, connecting over the internet is notoriously well known in the art. Examiner takes official notice for the internet. A person of ordinary skill in the art at the time of the invention would have been motivated to connect to a server over the internet because it provides up to global connectivity. Further, from line 58 of column 3, "A "network" may include any type of data communications channel, such as an Ethernet network, token ring, X.10, or X.25. Those skilled in the art will recognize that the invention described herein

Art Unit: 2114

may be implemented utilizing any type of data communications channel. However, the preferred embodiment is implemented utilizing an Ethernet network."

28. Referring to claim 20, although Cromer et al. does not specifically disclose one of said components is a modem, including a modem in a computer system is notoriously well known in the art. Examiner takes official notice for modems. A person of ordinary skill in the art at the time of the invention would have been motivated to include a modem in a computer system because it allows a computer to access a communications medium, such as a cable network or telephone lines, for data communications. Further, from line 58 of column 3, "A "network" may include any type of data communications channel, such as an Ethernet network, token ring, X.10, or X.25. Those skilled in the art will recognize that the invention described herein may be implemented utilizing any type of data communications channel. However, the preferred embodiment is implemented utilizing an Ethernet network."

29. Referring to claim 21, although Cromer et al. does not specifically disclose said computer system connects to said recovery server over a direct dial connection, connecting a computer by dialing into a network is notoriously well known in the art. Examiner takes official notice for dial-up connections. A person of ordinary skill in the art at the time of the invention would have been motivated to use dial-up a connection to connect to a server because he or she would have been able to connect wherever there is a telephone connection. Further, from line 58 of column 3, "A "network" may include any type of data communications channel, such as an Ethernet network, token ring, X.10, or X.25. Those skilled in the art will recognize that the invention described herein

Art Unit: 2114

may be implemented utilizing any type of data communications channel. However, the preferred embodiment is implemented utilizing an Ethernet network.”

30. Referring to claim 22, although Cromer et al. does not specifically disclose said computer system connects to said recovery server through an internet service provider, connecting to a server over an ISP is notoriously well known in the art. Examiner takes official notice for ISPs. A person of ordinary skill in the art at the time of the invention would have been motivated to connect to a server using an ISP because ISPs provide access to the internet, a global communications network that interconnects networks of various design. Further, from line 58 of column 3, “A “network” may include any type of data communications channel, such as an Ethernet network, token ring, X.10, or X.25. Those skilled in the art will recognize that the invention described herein may be implemented utilizing any type of data communications channel. However, the preferred embodiment is implemented utilizing an Ethernet network.”

31. **Claims 49, 50 are rejected under 35 U.S.C. 103(a) as being unpatentable over US 6314455 to Cromer et al. in view of US 5230052 to Dayan et al. as applied to claim 1 above, and further in view of US 5319519 to Sheppard et al.** Referring to claims 49, 50, Cromer discloses, in the background, connecting to a conventional recovery source; downloading an uncorrupted version of said BIOS from said conventional recovery source; programming said uncorrupted BIOS onto said computer system's BIOS storage area; and rebooting said computer system, wherein said conventional recovery source is a removable disk (From line 4 of column 2, “POST and BIOS are both typically stored as a single flash image in a storage device such as a

Art Unit: 2114

flash memory. This image is commonly called the "boot code". If the flash image of POST and BIOS is corrupted, the boot of the system will not be able to be completed. To recover from a defective flash image error, known systems include a boot block. The boot block is storage within the flash memory which includes a small segment of code sufficient to bring the system up, and to read a recovery image from a floppy drive. A diskette must be inserted into the floppy drive which includes a good copy of the flash image. The code stored in the boot block is not typically updated. In order for the system to boot from the boot block, a technician must remove the cover of the computer system, and physically move a jumper coupled to the flash memory. The jumper is utilized to indicate whether a boot will be attempted from the boot block or the main flash memory. The technician then must replace the cover, insert an appropriate diskette in the floppy drive, and restart the computer. The computer will then attempt to boot from the boot block.").

Although, clearly, this passage refers to procedures taken prior to the availability of a recovery server, a person of ordinary skill in the art at the time of the invention, in all likelihood, would have been able to understand that if remote data was unavailable (located), and that if the data is still required, local data must be used instead. An example of this common understanding among people of ordinary skill in the art is shown by Sheppard, from line 35 of column 2, "When networks or network software are unavailable, the person must take his data base with him. He can do this by disconnecting his hard disk drive from his PC, transporting his hard disk drive with him, and then reconnecting the disk drive to a computer located at the remote site.

Art Unit: 2114

Alternatively, the person can up-load his data base to a large number of floppy disks one at a time, transport the floppy disks to the remote site, and then down-load the data base from the floppy disks one at a time onto a computer located at the remote site. Unfortunately, both procedures are cumbersome and time-consuming." A person of ordinary skill in the art at the time of the invention would have been motivated to prepare for the unavailability of a remote data source because, from Sheppard, "When networks or network software are unavailable, the person must take his data base with him."

32. Claims 51, 52 are rejected under 35 U.S.C. 103(a) as being unpatentable over US 6314455 to Cromer et al. in view of JP409258965A to Aoki and US 5230052 to Dayan et al. as applied to claim 15 above, and further in view of US 5319519 to Sheppard et al. Referring to claims 49-52, Cromer discloses, in the background, connecting to a conventional recovery source; downloading an uncorrupted version of said BIOS from said conventional recovery source; programming said uncorrupted BIOS onto said computer system's BIOS storage area; and rebooting said computer system, wherein said conventional recovery source is a removable disk (From line 4 of column 2, "POST and BIOS are both typically stored as a single flash image in a storage device such as a flash memory. This image is commonly called the "boot code". If the flash image of POST and BIOS is corrupted, the boot of the system will not be able to be completed. To recover from a defective flash image error, known systems include a boot block. The boot block is storage within the flash memory which includes a small segment of code sufficient to bring the system up, and to read a

Art Unit: 2114

recovery image from a floppy drive. A diskette must be inserted into the floppy drive which includes a good copy of the flash image. The code stored in the boot block is not typically updated. In order for the system to boot from the boot block, a technician must remove the cover of the computer system, and physically move a jumper coupled to the flash memory. The jumper is utilized to indicate whether a boot will be attempted from the boot block or the main flash memory. The technician then must replace the cover, insert an appropriate diskette in the floppy drive, and restart the computer. The computer will then attempt to boot from the boot block.”).

Although, clearly, this passage refers to procedures taken prior to the availability of a recovery server, a person of ordinary skill in the art at the time of the invention, in all likelihood, would have been able to understand that if remote data was unavailable (located), and that if the data is still required, local data must be used instead. An example of this common understanding among people of ordinary skill in the art is shown by Sheppard, from line 35 of column 2, “When networks or network software are unavailable, the person must take his data base with him. He can do this by disconnecting his hard disk drive from his PC, transporting his hard disk drive with him, and then reconnecting the disk drive to a computer located at the remote site. Alternatively, the person can up-load his data base to a large number of floppy disks one at a time, transport the floppy disks to the remote site, and then down-load the data base from the floppy disks one at a time onto a computer located at the remote site. Unfortunately, both procedures are cumbersome and time-consuming.” A person of ordinary skill in the art at the time of the invention would have been motivated to

Art Unit: 2114

prepare for the unavailability of a remote data source because, from Sheppard, "When networks or network software are unavailable, the person must take his data base with him."

Response to Arguments

33. Applicant's arguments with respect to claims 1-52 have been considered but are moot in view of the new ground(s) of rejection. Specifically regarding "single request" language, Examiner has provided a rejection based on the hypothetical inclusion of such non-supported subject matter, however noting that even upon removal of the offending matter, the prior rejection is the basis for the current rejection, and thus, still applicable.

34. Examiner notes that nowhere specified is what "system information" might be. Stemming from the dearth of information provided in Applicant's specification regarding the requesting and information exchange processes, steps 422, 424, 426, 428 of Cromer may be interpreted as a "single request", and "system information" interpreted as the download target address (the client). This interpretation has not been applied so that a rejection closer to Applicant's hypothetical intended meaning may be rejected, but is included to expedite prosecution.

Conclusion

35. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. See Notice of References Cited.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gabriel L. Chu whose telephone number is (571) 272-

Art Unit: 2114

3656. The examiner can normally be reached on weekdays between 8:30 AM and 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert W. Beausoliel, Jr. can be reached on (571) 272-3645. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Gabriel L. Chu
Examiner
Art Unit 2114

gc